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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/086,782	02/28/2002	Carol L. Colrain	50277-1957(OID No. 2000-1	8991
29989	7590	10/07/2004	EXAMINER	
HICKMAN PALERMO TRUONG & BECKER, LLP 1600 WILLOW STREET SAN JOSE, CA 95125			DODDS, HAROLD E	
			ART UNIT	PAPER NUMBER
			2167	

DATE MAILED: 10/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/086,782

Applicant(s)

COLRAIN ET AL.

Examiner

Harold E. Dodds, Jr.

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 5.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Specification*

1. The attempt to incorporate subject matter into this application by reference to "Co-Pending Applications" is improper because the U.S. Patent Application Numbers have not been supplied.

Correction is required.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gamache et al. (U.S. Patent No. 6,401,120) and Larson (U.S. Patent No. 5,659,781).

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4. Gamache renders obvious independent claims 1 and 15 by the following:

"...a cluster framework including a plurality of nodes..." at col. 5, lines 53-56.

"...a plurality of cooperative resource groups..." at col. 5, lines 31-35.

"...each comprising a logical network address..." at col. 6, lines 24-27 and col. 7, lines 55-57.

"...at least one monitor..." at col. 7, lines 48-50.

"...and an application providing services..." at col. 5, lines 37-38.

"...using the logical network address..." at col. 6, lines 24-27 and col. 7, lines 55-57.

"...and a plurality of resources..." at col. 5, lines 31-35.

"...each comprising a cluster service supporting the services..." at col. 5, lines 54-56.

"...provided by each application..." at col. 5, lines 37-38.

"...for each cooperative resource group..." at col. 5, lines 31-35.

"...a preferred node for execution..." at col. 9, lines 15-19 and col. 8, lines 4-8.

"...and one or more possible nodes as standby nodes..." at col. 9, lines 9-10.

"...for each other cooperative resource group..." at col. 5, lines 31-35.

"...and each such cluster service restarting the services..." at col. 5, lines 54-56 and col. 8, lines 35-37.

"...on a surviving node..." at col. 11, lines 2-5.

"...of the preferred node..." at col. 9, lines 15-19.

"...upon an unavailability of the preferred node..." at col. 20, lines 10-12 and col. 9, lines 15-19.

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"...while keeping the logical network address available..." at col. 6, lines 24-27 and col. 7, lines 55-57.

"...on each possible node for the cooperative resource group..." at col. 5, lines 53-56 and col. 5, lines 31-35.

Gamache does not teach the use of external access and critical paths.

5. However Larson teaches the use of external access and critical paths as follows:

"...and externally accessed..." at col. 16, lines 25-26.

"...off a critical path..." at col. 2, lines 17-19.

It would have been obvious to one of ordinary skill at the time of the invention to combine Larson with Gamache to provide external access in order to be able to obtain data from other members of a network and to promote user acceptance of the system. Likewise, it would have been obvious to one of ordinary skill at the time of the invention to combine Larson with Gamache to provide critical paths in order to provide an optimal configuration between nodes for the transmission of data. Gamache and Larson teach the use of related systems. They teach the use of computers, the use of networks, the use of nodes, the use of services, the use of resources, the use of applications, the monitoring of status, the use of paths, and the detection of failures.

6. As per claims 2 and 16, the "...run method starting each cooperative resource group..." is taught by Gamache at col. 11, lines 10-14 and col. 5, lines 31-35, the "...in an ordered fashion..." is taught by Gamache at col. 8, lines 63-65,

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the "...on a preferred node or on a possible node..." is taught by Gamache at col. 9, lines 15-19 and col. 11, lines 2-5,

the "...and a halt method stopping each cooperative resource group..." is taught by Gamache at col. 6, lines 65-67, col. 7, lines 1-3, and col. 5, lines 31-35,

the "...in an ordered fashion..." is taught by Gamache at col. 8, lines 63-65,

and the "...on the node on which the halt method is running..." is taught by Gamache at col. 6, lines 65-67 and col. 7, lines 1-3.

7. As per claims 3 and 17, the "...a watchdog process in one such cooperative resource group..." is taught by Gamache at col. 7, lines 45-50 and col. 5, lines 31-35,

the "...executing upon a failure or shutdown..." is taught by Gamache at col. 8, lines 63-65 and col. 9, lines 6-8,

and the "...of the cooperative resource group..." is taught by Gamache at col. 5, lines 31-35.s

8. As per claims 4 and 18, the "...cluster service..." is taught by Gamache at col. 5, lines 54-56,

the "...operates in a normal mode..." is taught by Larson at col. 42, lines 55-57,

the "...with each cooperative resource group..." is taught by Gamache at col. 5, lines 31-35,

and the "...executing on the preferred node..." is taught by Gamache at col. 9, lines 15-19.

9. As per claims 5 and 19, the "...cluster service...", is taught by Gamache at col. 5, lines 54-56,  
the "...operates in an off-line mode...", is taught by Gamache at col. 8, lines 34-35,  
and the "...with the logical network address available...", is taught by Gamache at col. 6, lines 24-27 and col. 7, lines 55-57.

10. As per claims 6 and 20, the "...cluster service transfers the service...", is taught by Gamache at col. 5, lines 54-56 and col. 12, lines 40-45,  
the "...off the critical path...", is taught by Larson at col. 2, lines 17-19,  
the "...from the preferred node to one such possible node...", is taught by Gamache at col. 9, lines 15-19 and col. 9, lines 9-10,  
the "...responsive to a failover of the application...", is taught by Gamache at col. 8, lines 66-67 and col. 9, lines 1-2,  
and the "...in one such cooperative resource group...", is taught by Gamache at col. 5, lines 31-35.

11. As per claims 7 and 21, the "...cluster service resumes the service...", is taught by Gamache at col. 5, lines 54-56 and col. 18, lines 26-27,  
the "...off the critical path...", is taught by Larson at col. 2, lines 17-19,  
the "...on another cooperative resource group...", is taught by Gamache at col. 5, lines 31-35,  
the "...responsive to a failure or shutdown of the application...", is taught by Gamache at col. 8, lines 66-67 and col. 9, lines 1-2,

the "...and the logical network address is kept available...", is taught by Gamache at col. 6, lines 24-27 and col. 7, lines 55-57,  
and the "...on each possible node...", is taught by Gamache at col. 11, lines 2-5.

12. As per claims 8 and 22, the "...cluster service...", is taught by Gamache at col. 5, lines 54-56,  
the "...provides the logical network address...", is taught by Gamache at col. 6, lines 24-27 and col. 7, lines 55-57,  
the "...of one such application...", is taught by Gamache at col. 5, lines 37-38,  
and the "...upon a failure or shutdown of the application...", is taught by Gamache at col. 8, lines 66-67, col. 9, lines 1-2, and col. 9, lines 6-8.

13. As per claims 9 and 23, the "...cluster service transfers the service...", is taught by Gamache at col. 5, lines 54-56 and col. 12, lines 40-45,  
the "...off the critical path...", is taught by Larson at col. 2, lines 17-19,  
the "...to one such possible node...", is taught by Gamache at col. 11, lines 2-5,  
and the "...responsive to a switchover of the application...", is taught by Gamache at col. 12, lines 40-45 and col. 5, lines 37-38.

14. As per claims 10 and 24, the "...a sequenced list of possible nodes...", is taught by Gamache at col. 8, lines 63-65  
and the "...for each cooperative resource group...", is taught by Gamache at col. 5, lines 31-35.



15. As per claims 11 and 25, the "...cluster service disables switching between the possible nodes...", is taught by Gamache at col. 5, lines 54-56, col. 6, lines 12-14, and col. 12, col. 40-45, the "...for a last such possible node...", is taught by Gamache at col. 11, lines 2-5, the "...for each cooperative resource group...", is taught by Gamache at col. 5, lines 15-35, and the "...and issues an alert...", is taught by Gamache at col. 15, lines 17-21.

16. As per claims 12 and 26, the "...cluster service provides notification of a service start...", is taught by Gamache at col. 5, lines 54-56, col. 15, lines 17-21, and col. 6, lines 65-67, the "...by sending a service up event notification...", is taught by Gamache at col. 6, lines 65-67 and col. 15, lines 17-21, and the "...from each preferred node...", is taught by Gamache at col. 9, lines 15-19.

17. As per claims 13 and 27, the "...cluster service provides notification of a service halt...", is taught by Gamache at col. 5, lines 54-56, col. 15, lines 17-21, and col. 6, lines 65-67, the "...by sending a service down event notification...", is taught by Gamache at col. 6, lines 65-67 and col. 15, lines 17-21, and the "...from each preferred node...", is taught by Gamache at col. 9, lines 15-19.

18. As per claims 14 and 28, the "...cluster service...", is taught by Gamache at col. 5, lines 54-56,

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the "...acquires an internet protocol address...", is taught by Gamache at col. 5, lines 39-43,

the "...as the logical network address...", is taught by Gamache at col. 6, lines 24-27 and col. 7, lines 55-57,

and the "...upon executing the run method...", is taught by Gamache at col. 8, lines 4-6.

19. As per claim 29, the "...computer-readable storage medium holding code for performing the method according to Claim 15...", is taught by Gamache in Figure 1.

20. As per independent claims 30 and 37, the "...a node designated as a preferred node...", is taught by Gamache at col. 9, lines 15-19,  
the "...within a cluster framework...", is taught by Gamache at col. 5, lines 53-58,  
the "...comprising a plurality of cooperative resource groups...", is taught by Gamache at col. 5, lines 31-33,  
the "...cluster framework stack...", is taught by Larson at col. 14, lines 46-47 and col. 39, lines 37-40,  
the "...started on the preferred node...", is taught by Gamache at col. 9, lines 15-19,  
the "...comprising an internet protocol address...", is taught by Gamache at col. 5, lines 39-43,  
the "...application...", is taught by Gamache at col. 5, lines 37-38,  
the "...and application event monitors for the application...", is taught by gamache at col. 5, lines 37-38 and col. 7, lines 48-50,  
the "...and a run module sending notification...", is taught by col. 15, lines 17-21,

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the "...to each other such cooperative resource group...", is taught by Gamache at col. 5, lines 31-35,

the "...within the cluster framework...", is taught by Gamache at col. 5, lines 53-58,

the "...that the application is running and available for service...", is taught by Gamache at col. 5, lines 37-39 and col. 15, lines 41-45,

the "...and a switching module enabling cooperative resource group switching...", is taught by Gamache at col. 12, lines 40-45 and col. 5, lines 31-33,

the "...from the preferred node...", is taught by Gamache at col. 9, lines 15-19,

the "...off a critical path...", is taught by Larson at col. 2, lines 17-19,

and the "...for the application...", is taught by Gamache at col. 5, lines 37-38.

21. as per claims 31 and 38, the "...at least one other node within the cluster framework designated as a possible node...", is taught by Gamache at col. 5, lines 53-58,

the "...comprising acquiring a further internet protocol address...", is taught by Gamache at col. 39-53,

and the "...for each such possible node...", is taught by Gamache at col. 11, lines 2-5.

22. As per claims 32 and 39, the "...cluster service...", is taught by Gamache at col. 5, lines 54-56,

the "...executing within the cluster framework...", is taught by Gamache at col. 5, lines 53-58,

the "...and restarting the application...", is taught by Gamache at col. 8, lines 35-37,

the "...off the critical path...", is taught by Larson at col. 2, lines 17-19,

the "...on the possible node...", is taught by Gamache at col. 11, lines 2-5,  
and the "...responsive to one of a failover and a switchover...", is taught by Gamache at  
col. 8, lines 63-65 and col. 12, lines 40-45.

23. As per claims 33 and 40, the "...halt method halting the application...", is  
taught by Gamache at col. 6, lines 65-67 and col. 5, lines 37-38,  
the "...on the preferred node in parallel...", is taught by Gamache at col. 9, lines 15-19,  
the "...responsive to the failover or the switchover...", is taught by Gamache at col. 8,  
lines 63-65 and col. 12, lines 40-45,  
and the "...comprising releasing the further internet protocol address...", is taught by  
Gamache at col. 5, lines 39-43.

24. As per claims 34 and 41, the "...watchdog process...", is taught by  
Gamache at col. 7, lines 48-50,  
the "...on the preferred node...", is taught by Gamache at col. 9, lines 15-19,  
and the "...upon the halting of the application...", is taught by Gamache at col. 6, lines  
65-67 and col. 5, lines 37-38.

25. As per claims 35 and 42, the "...a halt module...", is taught by Gamache at  
col. 6, lines 65-67 and col. 7, lines 1-3,  
the "...disabling cooperative resource group...", is taught by Gamache at col. 6, lines 12-  
14 and col. 5, lines 31-35,  
the "...switching on a last such possible node...", is taught by Gamache at col. 12, lines  
40-45 and col. 12, lines 9-12,

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and the "...for each cooperative resource group..." is taught by Gamache at col. 5, lines 31-35.

26. As per claims 36 and 43, the "...a halt module halting..." is taught by Gamache at col. 6, lines 65-67, the "...cluster framework stack..." is taught by Larson at col. 14, lines 46-47 and col. 39, lines 37-40, the "...comprising stopping the application event monitors..." is taught by Gamache at col. 6, lines 65-67, col. 7, lines 13-16, and col. 7, lines 48-50, the "...stopping the application..." is taught by Gamache at col. 9, lines 6-8, the "...and releasing the internet protocol address..." is taught by Gamachre at col. 5, lines 39-43, the "...and a run module sending notification..." is taught by Gamache at col. 5, lines 53-56 and col. 15, lines 17-21, the "...to each other such cooperative resource group..." is taught by Gamache at col. 5, lines 31-35, the "...within the cluster framework..." is taught by Gamache at col. 5, lines 53-56, and the "...that the application is down and unavailable for service..." is taught by Gamache at col. 7, lines 13-16, col. 6, lines 56-61, and col. 20, lines 10-12.

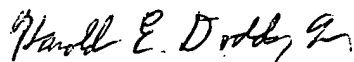
27. As per claim 44, the "...computer-readable storage medium holding code for performing the method according to Claim 37..." is taught by Gamache in Figure 1.

**Conclusion**

28. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harold E. Dodds, Jr. whose telephone number is (571)-272-4110. The examiner can normally be reached on Monday - Friday 8:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Breene can be reached on (703)-305-9790. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Harold E. Dodds, Jr.  
Patent Examiner  
October 5, 2004



GRETA ROBINSON  
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